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Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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Anti-GRP78 Antibody [1H11-1H7]

Mouse Anti-Human GRP78 Monoclonal IgG2b
Catalog No. SMC-195

StressMarq Biosciences INC.
Discovery through partnership | Excellence through quality

Overview

Product Name

GRP78 Antibody

Description

Mouse Anti-Human GRP78 Monoclonal IgG2b

Species Reactivity

Human, Monkey, Mouse, Rat, African clawed frog (Xenopus laevis), Bovine, Chestnut Blight (Cryphonectria parasitica), Fungi, Hamster, Rabbit

Applications

WB, ICC/IF

Antibody Dilution

WB (1:2000), ICC/IF (1:100); optimal dilutions for assays should be determined by the user.

Host Species

Mouse

Immunogen Species

Human

Immunogen

His-tagged human GRP78

Concentration

1 mg/ml

Conjugates

Alkaline Phosphatase, APC, ATTO 390, ATTO 488, ATTO 565, ATTO 594, ATTO 633, ATTO 655, ATTO 680, ATTO 700, Biotin, FITC, HRP, PE/ATTO 594, PerCP, RPE, Streptavidin, Unconjugated

Properties

Storage Buffer

PBS pH7.4, 50% glycerol, 0.09% sodium azide

Storage Temperature

-20ºC

Shipping Temperature

Blue Ice or 4ºC

Purification

Protein G Purified

Clonality

Monoclonal

Clone Number

1H11-1H7

Isotype

IgG2b

Specificity

Detects ~78kDa.

Cite This Product

Mouse Anti-Human GRP78 Monoclonal, Clone 1H11-1H7 (StressMarq Biosciences Inc., Victoria BC CANADA, Catalog # SMC-195)

Certificate Of Analysis

0.5 µg/ml of SMC-195 was sufficient for detection of Grp78 in 10 µg of rat tissue lysate by ECL immunoblot analysis.

Biological Description

Alternative Names

78 kDa glucose regulated protein Antibody, 78 kDa glucose-regulated protein Antibody, AL022860 Antibody, AU019543 Antibody, BIP Antibody, D2Wsu141e Antibody, D2Wsu17e Antibody, Endoplasmic reticulum lumenal Ca(2+)-binding protein grp78 Antibody, Endoplasmic reticulum lumenal Antibody, Ca2+ binding protein grp78 Antibody, FLJ26106 Antibody, Glucose Regulated Protein 78kDa Antibody, GRP 78 Antibody, GRP-78 Antibody, GRP78_HUMAN Antibody, Heat shock 70 kDa protein 5 Antibody, Heat Shock 70kDa Protein 5 Antibody, HSCe70 Antibody, HSPA 5 Antibody, HSPA5 Antibody, Immunoglobulin Heavy Chain Binding Protein Antibody, Immunoglobulin heavy chain-binding protein Antibody, mBiP Antibody, MIF2 Antibody, Sez7
Antibody

Research Areas

Cancer, Heat Shock, Cell Signaling, Chaperones, Organelle Markers, Trafficking

Cellular Localization

Endoplasmic Reticulum, Endoplasmic reticulum lumen, Melanosome

Accession Number

NP_001156906.1

Gene ID

14828

Swiss Prot

P20029

Scientific Background

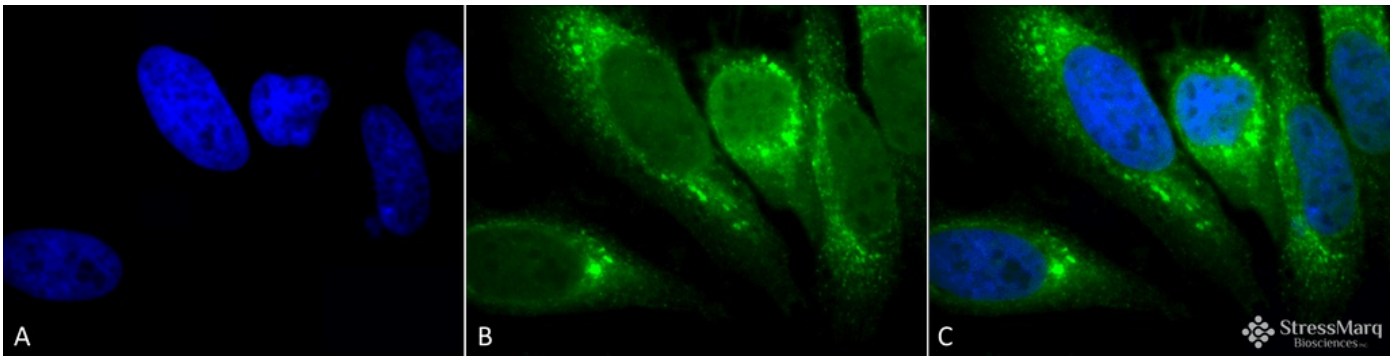
GRP78 is a ubiquitously expressed, 78-kDa glucose- regulated protein, and is commonly referred to as an immunoglobin chain binding protein (BiP). The BiP proteins are categorized as stress response proteins because they play an important role in the proper folding and assembly of nascent protein and in the scavenging of misfolded proteins in the endoplasmic reticulum lumen. Translation of BiP is directed by an internal ribosomal entry site (IRES) in the 5' non-translated region of the BiP mRNA. BiP IRES activity increases when cells are heat stressed (1).
GRP78 is also critical for maintenance of cell homeostasis and the prevention of apoptosis (2). Lou et al. have provided findings

that suggest GRP78 is essential for embryonic cell growth and pluripotent cell survival (3).
In terms of diseases, GRP78 has been shown to be a reliable biomarker of hypoglycemia, to serve a neuroprotective function in neurons exposed to glutamate and oxidative stress (4), and its protein levels are reduced in the brains of Alzheimers patients (5). Also, the induction of the GRP78 protein that results in severe glucose and oxygen deprivation could possible lead to drug resistance to anti-tumor drugs (6, 7).

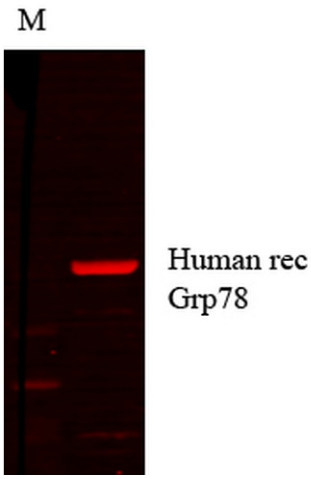
References

1. Cho S., et al. (2007) Mol Cell Biol. 27(1): 368-83.
2. Yang Y., et al. (1998) J Biol Chem 273: 25552-25555.
3. Luo S., et al (2006) 26 (15): 5688-97.
4. Yu Z., et al. (1999) Exp Neurol. 15: 302-314.
5. Koomagi R., et al. (1999) Anticancer Res. 19:4333-4336.
6. Laquerre S., et al. (1998) J. Virology 72: 4940-4949.
7. Dong D., et al. (2005) Cancer Res 65(13): 5785-91.

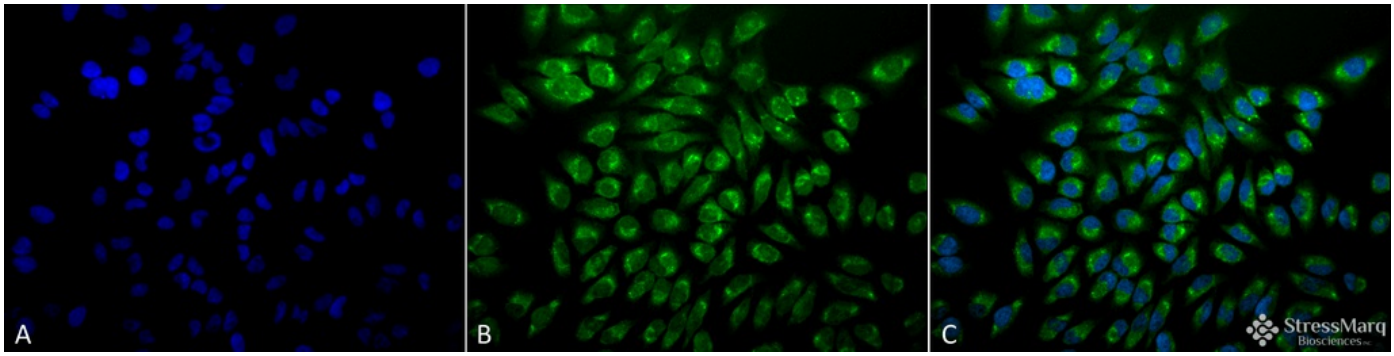
Product Images



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-GRP78 Monoclonal Antibody, Clone 1H11-1H7 (SMC-195). Tissue: Heat Shocked HeLa Cells. Species: Human. Fixation: 2% Formaldehyde for 20 min at RT. Primary Antibody: Mouse Anti-GRP78 Monoclonal Antibody (SMC-195) at 1:100 for 12 hours at 4°C. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:200 for 2 hours at RT. Counterstain: DAPI (blue) nuclear stain at 1:40000 for 2 hours at RT. Localization: Endoplasmic reticulum lumen. Melanosome. Magnification: 100x. (A) DAPI (blue) nuclear stain. (B) Anti-GRP78 Antibody. (C) Composite.



Western Blot analysis of Human cell lysates showing detection of GRP78 protein using Mouse Anti-GRP78 Monoclonal Antibody, Clone 1H11-1H7 (SMC-195). Primary Antibody: Mouse Anti-GRP78 Monoclonal Antibody (SMC-195) at 1:1000.



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Product Citations (0)

Currently there are no citations for this product.

Reviews

There are no reviews yet.